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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,440	01/11/2002	Kevin W. Haulk	10110.00	8408
26884	7590	05/24/2005	EXAMINER	
PAUL W. MARTIN LAW DEPARTMENT, WHQ-4 1700 S. PATTERSON BLVD. DAYTON, OH 45479-0001			DU, THUAN N	
			ART UNIT	PAPER NUMBER
			2116	

DATE MAILED: 05/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,440

Applicant(s)

HAULK ET AL.

Examiner

Thuan N. Du

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-19 are presented for examination.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admission of prior art [AAPA], Sugahara et al. [Sugahara] and Comer "Computer Networks and Internets" – 1999 [Comer].
4. Regarding claims 1 and 8, AAPA teaches a plurality of electronic shelf labels (ESL) coupled to a network and controlled by a central server [application's specification, p. 1, lines 12-16]. Each of the ESL comprising a receiver for receiving messages and a battery for powering the receiver [application's specification, p. 1, lines 17-19]. AAPA does not teach that the battery power is removed from the receiver of the ESL when the ESL is not scheduled to receive messages.

Sugahara teaches a method of reducing power consumption by an electronic device (computing device) comprising the steps of:

determining a time period when the electronic device is not used [col. 4, lines 55-58; col. 6, lines 20-23; col. 8, lines 15-18];

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transmitting at least one message to the electronic device instructing the device to enter a reduced power consumption mode by removing power from at least a portion of the receiver during the time period [col. 4, lines 36-39, 45-48, 55-58; col. 8, lines 52-58];

removing power from the portion of the receiver by the electronic device at the beginning of the time period to enter the reduced power consumption mode [col. 5, lines 60-63; col. 9, lines 41-45].

supplying power to the electronic device at the end of the time period to resume normal operation [col. 8, lines 15-16].

Sugahara does not explicitly teach that the electronic device is an electronic shelf label (ESL) powered by battery. However, one of ordinary skill in the art would have recognized that the ESL is an electronic device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the teachings of Sugahara to remotely and centrally managing and controlling the ESLs power consumption, so that the ESLs can be utilized efficiently from the point of the power consumption [col. 2, lines 22-27].

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Sugahara to AAPA system because it would reduce the power consumed and therefore, reduce the cost.

Both AAPA and Sugahara do not explicitly teach that the electronic devices communicate with the central server through a wireless communication link. However, Sugahara suggests that any known network structure can be used for the communication between the server and the electronic devices. One of ordinary skill in the art would have recognized that

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a wireless networking is a known network structure which is widely use for convenience and cable saving.

Comer teaches a wireless LAN is used for communicating between devices instead of wired LAN to save cables [p. 82, section 7.9].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of AAPA-Sugahara to use a wireless LAN instead of a wired LAN to avoid running cables throughout the store.

5. Regarding claims 2-4, Sugahara teaches the start and end time and a duration for the reduced power consumption mode [col. 8, lines 15-18].

6. Regarding claim 5, AAPA teaches that the message is transmitted to plurality of ESLs [application's specification, p. 1, lines 15-16].

7. Regarding claims 6 and 7, AAPA teaches that that ESL is disposed in a retail establishment [application's specification, p. 1, lines 10-12] and the time period corresponds generally to when the retail establishment is closed or open [application's specification, p. 2, lines 6-9].

8. Regarding claim 9, it would have been obvious to one of ordinary skill in the art to recognize that the electronic device ceases to monitor for received messages during an off state.

9. Regarding claim 10, it would have been obvious to one of ordinary skill in the art to recognize that the electronic device can be wakening up by depressing a button.

10. Regarding claims 11-19, AAPA, Sugahara and Comer teach the claimed method steps. Therefore, AAPA, Sugahara and Comer teach the apparatus to implement the claimed method steps.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuan N. Du whose telephone number is (571) 272-3673. The examiner can normally be reached on Monday-Friday: 9:30 am - 6:00 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on (571) 272-3670.

Central TC telephone number is (571) 272-2100.

The fax number for the organization is (703) 872-9306.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

A handwritten signature in black ink, appearing to read 'Thuan N. Du', with a stylized flourish at the end.

Thuan N. Du
May 19, 2005